
Chapter 5: Action Plan

The City of Yukon has reviewed and analyzed the risk assessment studies for the natural hazards and hazardous material events that may impact the community. The YHMCAC prioritized the mitigation measures identified in Chapter 4, and developed an Action Plan for the highest priority measures. This chapter identifies specific high priority actions to achieve the City's mitigation goals, the lead agency responsible for implementation of each action item, an anticipated time schedule, estimated cost opinion, and identification of possible funding sources.

Hazardous Materials

1. Develop and reinforce hazardous materials emergency equipment and response teams.

Lead: Emergency Manager, Fire Department, Police Department

Time Schedule: July 1, 2005

Estimated Cost: \$500,000

Source of Funding: General budget, Oklahoma Department of Human Services, Federal Emergency Management Agency (FEMA),

Work Product/Expected Outcome: 1) Inventory local fire and law enforcement resources, train and certify appropriate hazmat technical teams, find funding to equip response teams of needed supplies not already available or of limited availability; 2) Coordinate city's hazmat response procedures with private facilities' emergency response/risk management plans.

Transportation

2. Assess risks and develop a plan for responding to hazardous materials incidents on major transportation routes through the community.

Lead: Fire Department, Public Works

Time Schedule: July 1, 2005

Estimated Cost: \$20,000

Source of Funding: General budget, Federal Emergency Management Agency (FEMA).

Work Product/Expected Outcome: Identify hazardous materials and the transportation systems used in their transport; inventory 1) vulnerable populations in those areas 2) accessible fire and law enforcement resources useful for responding to hazardous

material incidents 3) coordinate Emergency Operations Planning with private hazardous material facilities Risk Management Plans and Procedures as required EPA.

General

3. Develop a secondary water supply system.

Lead: City administration

Time Schedule: July 1, 2009

Estimated Cost: \$125 million

Source of Funding: General budget, Municipal Bonds

Work Product/Expected Outcome: 1) Secure new wells for municipal water resources for the next 50 years; 2) Keep existing water treatment capabilities above current water treatment needs.

Winter Storms

4. Develop and assess a contingency plan for responding to massive power outages caused by severe storms and overload demands.

Lead: Emergency Manager

Time Schedule: July 1, 2005

Estimated Cost: \$10,000

Source of Funding: General budget, Association of Central Oklahoma Governments (ACOG).

Work Product/Expected Outcome: 1) Identify and correct power lines susceptible to tree limbs falling by continual pruning; 2) inventory available power backup equipment and provide those emergency facilities in need with back-up power supplies; 3) Review all critical facilities' backup fuel supplies for generators; 4) Inform citizens of the risk of indoor air pollution and toxic fumes that result from particular methods of home heating without power 5) Identify citizens that are especially vulnerable to winter storm power outages and organizations that are available for supporting those in need.

General

5. Develop a community debris management plan.

Lead: Emergency Manager and Public Works

Time Schedule: January 1, 2005

Estimated Cost: \$10,000

Source of Funding: General budget, Federal Emergency Management Agency (FEMA).

Work Product/Expected Outcome: 1) Identify locations clean up crews can deposit debris before a final disposal. Public safety and efficiency in relocating debris piles should be considered; 2) Assess priorities for clearing routes involving critical structures or facilities.

Urban Fires

6. Develop a plan that prioritizes replacement of inadequately sized water lines with lines of sufficient size to provide adequate fire protection.

Lead: City administration

Time Schedule: July 1, 2005

Estimated Cost: \$50,000

Source of Funding: General budget, Oklahoma Department of Commerce,

Work Product/Expected Outcome: 1) Develop and assess priorities for line replacement; 2) Provide fire response coverage to all businesses and residents of Yukon currently and for the foreseeable future.

General

7. Develop an all-hazard public information and awareness program.

Lead: Emergency Manager and Fire Department

Time Schedule: January 1, 2005

Estimated Cost: \$ 5,000

Source of Funding: General budget, Federal Emergency Management Agency (FEMA), Association of Central Oklahoma Governments (ACOG).

Work Product/Expected Outcome: Develop a plan for the distribution of hazard preparedness and mitigation literature to vulnerable populations. Emergency and hazard information translated into languages of large foreign, non-English speaking populations.

8. Acquire and utilize GIS and GPS technologies to record and maintain information on public infrastructure, private safe rooms and private water wells.

Lead: Community Development

Time Schedule: July 1, 2008

Estimated Cost: \$200,000

Source of Funding: General budget, Federal Emergency Management Agency (FEMA).

Work Product/Expected Outcome: GIS layer for public utility infrastructure and safety; GIS inventory of daytime populations; GPS the locations of community and private safe rooms as well as water wells for location after disaster. Have software capabilities and personnel available to utilize the map information.

9. Provide certified disaster training for city supervisory staff.

Lead: Emergency Manager, EMS-Plus, EMT's/First Responders

Time Schedule: July 1, 2005

Estimated Cost: \$10,000

Sources of Funding: Federal Emergency Management Agency (FEMA), Oklahoma Department of Human Services, Oklahoma Department of Emergency Management

Work Products/Expected Outcome: To enable City of Yukon supervisors to be able to respond during an emergency with the appropriate training to save lives.

10. Identify and maintain a list of resources to provide foreign language translators.

Lead: Emergency Manager

Time Schedule: January 1, 2004.

Estimated Cost: \$500

Source of Funding: General budget, Federal Emergency Management Agency (FEMA).

Work Product/Expected Outcome: Identify and contact bilingual resources who are willing to participate as translators during the event of an emergency.

Table 5–1: Multi-Hazard Mitigation Measures, By Priority and Hazard

<i>Rank</i>	<i>Category</i>	<i>Mitigation Measure</i>
1	HazMat Events	Develop and reinforce hazardous materials emergency equipment and response teams.
2	Transportation	Assess risks and develop a plan for responding to hazardous materials incidents on major transportation routes through the community.
3	General	Develop a secondary water supply system.
4	Winter Storms	Develop a contingency plan for responding to massive power outages caused by severe storms.
5	General	Develop a community debris management plan.
6	Urban Fires	Develop a plan for ongoing replacement of inadequately sized water lines with lines of sufficient size to provide adequate fire protection.
7	General	Develop an all-hazard public information and awareness program.
8	General	Acquire and utilize GIS and GPS technologies to record and maintain information on public infrastructure, private safe rooms and private water wells.
9	General	Provide certified disaster training for city supervisory staff.
10	General	Identify citizens who can serve as foreign language translators.
11	Lightning	Provide surge protection for computer-reliant critical facilities (e.g. 911 Center, EOC, police sub-stations, fire stations, etc.).
12	General	Evaluate and upgrade warning systems.
13	General	Provide backup facilities for the 911 Center and the Emergency Operations Center.
14	Lightning	Install lightning rods for protection of Critical Facilities.
15	General	Install an emergency communications network for fire, police, 911, EMT and other emergency operations.
16	HazMat	Update the study for routing of hazardous materials through the community.

Rank	Category	Mitigation Measure
17	Floods	Acquire accurate or verify accuracy of existing flood plain maps.
18	Tornadoes & High Winds	Inspect community schools for tornado and high wind vulnerability.
19	Tornadoes & High Winds	Install safe-rooms in schools.
20	Tornadoes & High Winds	Consider painting street names and house numbers on curbs for identifying addresses when landmarks are absent.
21	Winter Storms	Provide for routine trimming of trees to reduce power outages during storms.
22	Extreme Heat	Develop a Heat Emergency Action Plan for the community.
23	Drought	Provide public awareness designed to communicate the potential severity of a drought and the appropriate public response.
24	Urban Fires	Develop a public education program to explain the advantages of individual fire suppression in homes, including fire extinguishers.
25	HazMat Events	Develop and reinforce hazardous materials event equipment and response teams.
26	General	Teach community employees the symptoms of common, life-threatening emergencies and how to administer CPR and first aid.
27	Floods	Inventory inadequate bridges.
28	Winter Storms	Provide public awareness on effective ways to monitor and avoid ice damage, frozen pipes, and snow loads on roof systems.
29	Extreme Heat	Educate community employees on the symptoms of heat disorders and how to administer first aid.
30	Expansive Soils	Develop and implement a public and builder awareness plan of the dangers and impact to buildings from expansive soils.
31	Urban Fires	Install fire suppression systems for all city / county facilities.
32	Wildfires	Train and coordinate community fire, police, and public works on how to respond to a wildfire emergency.
33	HazMat Events	Provide public awareness programs relative to dumping household chemicals and automotive fluids into the sanitary sewer drain.
34	Floods	Implement structural and non-structural flood mitigation measures for flood-prone properties.
35	Floods	Educate the public on the different hazards that multi-sound warning sirens signify (e.g., tornado warning vs. flash-flood warning).
36	Tornadoes & High Winds	Install safe-rooms in daycare centers.
37	Tornadoes & High Winds	Prepare weather-warning systems for interstate travelers, such as traveler message boards and proper education for travelers.
38	Tornadoes & High Winds	Supply NOAA Weather Radio to all local government buildings, schools, hospitals, and critical facilities.
39	Hail Storms	Provide shelter for local government vehicles (e.g., Police, Public Works)
40	Winter Storms	Reduce the number of overhead power lines through consolidating existing lines and burying new lines underground.
41	Drought	Develop and implement plans to identify when a drought begins and ends.
42	Wildfires	Develop a fire emergency plan that assures access by fire vehicles to all areas included in the rural/urban interface fire danger area.
43	HazMat Events	Initiate/continue a city-wide household pollutant collection program, and build a year-round collection site.

Rank	Category	Mitigation Measure
44	Dam Failure	Develop warning and evacuation plans for areas at risk from dam failure or large release flooding.
45	General	Develop a “Helping Your Neighbors” program through the school system to encourage children to think of people who need special assistance during severe weather.
46	General	Develop public information and education plans for responding to natural hazards and hazardous material events.
48	Tornadoes & High Winds	Investigate community tornado shelter programs implemented in other cities or states.
49	Lightning	Add lightning warning to the current warning siren system.
50	Hail Storms	Provide hail-resistant roofing for community buildings.
51	Winter Storms	Upgrade communities’ equipment and vehicles for combating ice storm damage/adverse impact to public infrastructure.
52	Expansive Soils	Investigate codes/incentives for the construction of new foundations to mitigate expansive soil damage.
53	Urban Fires	Continue education and get funding to inform people on proper evacuation plans for city buildings, offices, and homes.
54	Urban Fires	Make sure fire extinguishers are strategically placed and properly maintained in all community facilities.
55	Urban Fires	Apply for mitigation funding for fire hydrant meter backflow preventers.
56	Wildfires	Develop a contingency plan for evacuating population endangered by a wildfire.
57	Wildfires	Develop a countywide fire response plan to facilitate the provisioning of water to fire departments during large fires.
58	Earthquakes	Provide public and builder awareness that construction techniques for mitigating tornado damage also mitigate earthquake damage.
59	Dam Failure	Develop computerized GIS modeling program for mapping appropriate cubic feet per second (CFS) dam release rates.
60	General	Establish working partnerships involving local government leaders, civic, business, and volunteer groups to create a safer community.
61	General	Develop daytime population maps for the community.
62	General	Provide security and surveillance equipment for police and fire stations.
63	Floods	Develop land-use ordinances to prevent construction in flood-prone locations.
64	Floods	Obtain elevation certificates for homes located in the floodplain.
65	Floods	Evaluate appropriate mitigation measures for homes located in the floodplain.
66	Tornadoes & High Winds	Install community safe-rooms / storm shelters.
67	Tornadoes & High Winds	Investigate adopting building codes / incentives leading to construction that is more resistant to tornadoes and high winds.
68	Tornadoes & High Winds	Provide safe-room rebates for especially-vulnerable populations (e.g., elderly, infirm, impoverished).
69	Tornadoes & High Winds	Insure that community building code requires proper shingle installation.
70	Lightning	Provide educational demonstrations and information on whole-house surge protection technology.

Rank	Category	Mitigation Measure
71	Lightning	Educate the community about proper lightning safety through public service announcements and other media outlets.
72	Lightning	Designate individuals at city recreation facilities who are educated in storm spotting and who have the authority to take proper action.
73	Hail Storms	Provide hail-resistant measures/materials to protect existing public infrastructure improvements.
74	Winter Storms	Investigate winterizing exposed elements of residential and commercial structures.
75	Winter Storms	Update the debris management plan.
76	Extreme Heat	Obtain funding for providing public awareness materials to vulnerable populations through participating community agencies.
77	Expansive Soils	Require foundation piers as part of the building code.
78	Wildfires	Develop a warning plan based on drought conditions and moisture measurements to alert officials of increased risk of wildfire.
79	Wildfires	Investigate and raise public awareness of fire-resistant materials for buildings.
80	Wildfires	Provide public education on controlled burns and use of fire-retardant vegetation.
81	Earthquakes	Consider adopting residential building codes that require earthquake-resistant construction, such as using foundation piers.